Federal Railroad Administration

49 CFR Part 232
Brake System Safety Standards for Freight
ASLRRA - Presentation

Test

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Test - Brake System Safety Standards for Freight

Please **circle** the **one best** or **one correct** choice on the **answer sheet**. Please **DO NOT** write in the test booklet.

1. In the context of Part 232, every railroad employee responsible for performing a transfer train air brake test shall:

a. Receive training on all aspects of Part 232.
b. Receive training on only those portions of Part 232 associated with their duties.
c. Have prior training/experience which was received on a Class I railroad.
d. Be assigned to perform only air brake related duties.

2. Factors that must be considered when making determinations about locations where power brake repairs can be made are:

a. The presence of hazardous conditions that affect the ability to safely make repairs of the type needed at the location.
b. The relevant weather conditions at the location that affect accessibility or create hazardous conditions.
c. The accessibility of the location to persons responsible for making repairs.
d. All the above.

3. Equipment found to be defective under Part 232 at the time a Class I brake test is performed may:

a. Move to destination for repair.
b. Be set out from the train.
c. Be repaired prior to the trains departure.
d. Both “b” and “c”.

4. Freight cars found to be defective under Part 232 shall:

a. Be tagged at the destination.
b. Be tagged at the location where the defect is first discovered.
c. Be tagged on both sides of the equipment.
d. Both “b” and “c”

5. Freight cars with Part 232 defective conditions:

a. May be hauled in a train which is required to receive a Class I brake test on the entire train.
b. May be placed at the rear of a train.
c. May be hauled in a train only in accordance with the requirements of Part 232.15.
d. May be hauled in a “hospital train”.

6. The percentages of operational power brakes on freight trains shall not be less than:

a. 100 percent at Class I brake test.
b. 85 percent at Class I brake test.
c. 100 percent at Transfer train brake test.
d. 75 percent.

7. When performing a Class I brake test:

a. Both sides of the train must be inspected sometime during the inspection process.
b. Both sides of the train must be inspected during the brake application.
c. One side of the train must be inspected sometime during the inspection process.
d. One side of the train may be inspected if all the pistons are visible from that side.

8. When performing a Transfer Train air brake test:

a. Both sides of the train must be inspected sometime during the inspection process.
b. Both sides of the train must be inspected during the brake application.
c. One side of the train must be inspected sometime during the inspection process.
d. Neither side, provided there is at least 60 lbs psi at the rear of the train.

9. Which of the following train air brake tests do not require an accurate gage at the rear of the train:

a. Class I.
b. Class II.
c. Transfer Train.
d. None of the above.

10. Factors that should be considered when making determinations whether a particular location is the nearest location where power brake repairs can be made are:

a. Can the railroad perform a Single Car Test at the location.
b. The availability of Qualified Mechanical Person(s) stationed at the location.
c. The safety of the employees responsible for getting the equipment to or from a particular location.
d. Both b & c

11. End-of-train devices (telemetry equipment), shall be tested for accuracy and calibrated if necessary according to manufacturer's specifications and procedures at least every:

a. 92 days.
b. 184 days.
c. 368 days.
d. Never, new telemetry equipment does not require test and calibration because it's self-calibrating.

12. Which of the following are not to be considered when calculating the percentage of operative power brakes in a train:

a. Hand or parking brake disconnected.
b. Brakes overdue for inspection, testing, maintenance or stenciling.
c. Piston travel ½ inch in excess of the outside limits contained on the stencil, sticker, or badge plate.
d. Both a & b

13. Calculating the percentage of operative brakes is calculated by:

a. Dividing the number of inoperative brake cylinders by the number of brake cylinders in the train.
b. Dividing the number of cut-in control valves by the number of control valves in the train.
c. Dividing the number of cut-out control valves by the number of brake cylinders with piston travel in excess of Class I limits in the train.
d. Dividing the number the inoperative brake cylinders by the number of control valves in the train.

14. Equipment in a train with inoperative brakes shall:

a. Not be placed at the rear of a train.
b. Not be placed in a train receiving a Class IA brake test.
c. Not be placed adjacent to a car containing a hazardous material.
d. Both a & c

15. Locomotives, excluding distributive power, left unattended outside of yard limits must have:

a. All hand or parking brakes applied on each locomotive in the consist.
b. The lead locomotive hand or parking brake applied at a minimum.
c. All hand or parking brakes applied on each locomotive in the consist plus ten percent of the cars in the train on grades of three percent or more.
d. The lead locomotive hand or parking brake applied at a minimum, plus ten percent of the cars in a train on grades of three percent or more.

16. Which of the following shall be observed when testing trains using the Air Flow Method (AFM):

a. Air pressure at the rear of the train shall be within 10 psi of the pressure at which the train will operate, but not less than 70 psi as indicated by accurate gauge or end-of-train device at the rear of train.
b. Air pressure at the rear of the train shall be within 15 psi of the pressure at which the train will operate, but not less than 75 psi as indicated by accurate gauge or end-of-train device at the rear of train.
c. Measured air flow as indicated by AFM gauge shall not exceed 65 cubic feet per minute.
d. Both b & c.

17. Brakes that fail to apply upon inspection during a Class I, Class II or transfer train brake test may be retested and shall remain applied for a period of not less than:

a. Two minutes.
b. Three minutes.
c. Four minutes.
d. Five minutes.

18. Except in cases where a railroad has declared the dynamic brakes on a freight locomotive deactivated, freight locomotives with inoperative dynamic brakes shall be repaired:

a. Within three calendar days of becoming defective.
b. Within 30 calendar days of becoming defective.
c. The next scheduled periodic inspection.
d. Both b & c.

19. A Class I brake test is not required on trains adding more than one solid block of cars if:

a. The blocks added have not been off air for more than four hours and are actually one block from a previous train that had previously received a Class I brake test, but were separated into multiple blocks due to space or trackage constraints.
b. The blocks are added to the head-end and rear-end of the train and had previously received a Class I brake test.
c. The blocks added were previously inspected by a Qualified Mechanical Inspector.
d. Both a & c.

20. Mechanical and/or electronic yard air devices shall be calibrated no less than every:

a. 92 days and annually respectively.
b. Annually and biennially respectively.
c. Biennially and triennially respectively.
d. 92 days and biennially respectively.

21. Yard air pressure at the opposite end of the consist or block of cars tested shall not be less than:

a. 60 psi and within 15 psi of the regulator valve setting on yard test device.
b. 65 psi and within 15 psi of the regulator valve setting on yard test device.
c. 70 psi and within 15 psi of the regulator valve setting on yard test device.
d. 75 psi and within 15 psi of the regulator valve setting on yard test device.

22. A previously inspected/tested train may not be:

a. Off air for no more than two hours without preforming additional testing.
b. Off air for no more than one hour without preforming additional testing.
c. Off air for no more than four hours without preforming additional testing.
d. Disconnected from a source of air supply.

23. Railroads shall inspect yard air sources not less frequently than:

a. Once every two calendar years, and also maintain written or electronic records of actions required during the inspection.
b. Every calendar year, and also maintain written or electronic records of actions required during the inspection.
c. Twice each calendar year, no less than five months apart, and also maintain written or electronic records of actions required during the inspection.
d. Every six months, and also maintain written or electronic records of actions required during the inspection.

24. Each car shall receive a single car test no less than every:

a. 12 months when on shop or repair track.
b. Five years.
c. Eight years from built or rebuilt date.
d. All the above.

25. A two-way end-of-train device shall be tested to determine if it is capable of initiating an emergency application from the rear of the train:

a. At each crew change point.
b. At point of installation.
c. Following any unintentional emergency application of the train brakes.
d. Both b & c.